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STATISTICAL INVESTIGATION OF THE IMPACT OF TIMING OF MARRIAGE ON MARITAL STABILITY OF FEMALE NIGERIANS

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ABSTRACT

This study is a cross-cultural investigation of the impact of Nigerian women's timing of marriage on their marital stability. Gross nuptiality tables and multiple decrement nuptiality tables are constructed based on census data, to examine the regional variations in the nuptiality patterns of Nigerian women across the six geo-political zones in the country. Methodological aspects of the model used in constructing the multiple decrement nuptiality was based on the assumption that re-entrants into marital union is not allowed. The results indicate that girl-child marriage and later-marriage increase the risk of marital dissolution. Various recommendations for policy interventions aimed at improving the marital stability of Nigerian women are stated.

KEYWORDS: Marital disruption, Gross nuptiality table, Multiple decrement table, Girl-child marriage, Nuptiality pattern.

1. INTRODUCTION

The age and rates of marriage formation, and its disruption are directly related to change in population composition, and the effective length of reproductive periods. There is therefore a necessity to examine the trends in marriage patterns and their changes for the female population in Nigeria. Marriage is universal and is the main social arrangement within which cohabitation and childbearing are encouraged by most society, (Cochrane *et al*, 1990; Jain, 1969). The universality of marriage in Nigeria is probably a reflection of the social and economic security marriage is perceived to provide. Marriage is generally deemed to mark the individuals' entry into reproductive activities, (National Population Commission, 1998). Formal education has a great influence on age-at-first-marriage and fertility, (Omu *et al*, 1986, Aborampah, 1987). Dissolution of marital unions exerts a negative influence on the reproductive scenario of married population, (Schoen *et al*, 1974). Separation, divorce and widowhood represent withdrawals from the married population, which tend to diminish the population to which births are likely to occur, and thereby change the structure, needs and functions of households. (Naushin *et al,* 1975). One of the most important demographic variables is marital status. Rate of marital dissolution when combined with age-at-first-marriage provides a means of investigating the extent to which timing of marriage is conducive to females' marital stability.

Nuptiality study deals with the frequency of marriages; with the characteristics of persons, united in marriage; and the dissolution of such unions, (Shryock *et al*, 1976). It is the rate of marriage formation and its dissolution among a population. Nuptiality patterns of women have rarely interested most researchers in developing countries due to lack of data on the subject, (Omideyi, 1986). Nevertheless some researchers in this field have made contributions on this subject, (Mertens, 1965; Naushin *et al*, 1975; Olusanya, 1982; Hajnal, 1953; Islam *et al*, 1998; Ephraim, 1999).

This study has its objectives in investigating the regional variations in nuptiality pattern, and in examining the influence of age-at-marriage on the marital stability of women across the social-cultural regions in Nigeria. The demographic tools employed for these purpose are:

(i) Gross nuptiality table, to describe the incidence of marriage among single female population.

(ii) Multiple decrement nuptiality tables, to determine the inter-regional differences in marital stability of married female population.

2. DATA

The data for this study are extracted from the 1991 population census conducted by the National Population Commission, Nigeria. The data are on marital status of female populations. The twelve states used in this study were selected from the six geo-political zones, with two states from each zone. Cluster random sampling technique was employed in the selection of the states for this study. It is proposed that the two states selected from each zone reflect the nuptiality pattern of the region.

The selected states are Bauchi and Yobe from Northeast, Kano and Sokoto from Northwest, Benue and Niger states from Northcentral. From Southeast zone, Anambra and Imo States , Osun and Ondo states from Southwest, and Akwa-Ibom and Edo from South-south zone.

3. SOCIO-CULTURAL CONTEXT OF MARRIAGE IN NIGERIA

In all the six geo-political zones in Nigeria, the predominant religion and cultural practices of the people in the region have great implications on the nuptiality

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pattern of female population of the region. The six geo-political zones in Nigeria are: Northeast, Northwest, North-central, Southeast, Southwest and South-south. All the states in each zone have similarities in terms of religious and cultural practices. Examining the nuptiality patterns of the six zones, therefore, will give a cross-cultural differences in the nuptiality pattern of female population in Nigeria.

In Northeast and Northwest, generally Islam is the predominant religion and female child marriage is prevalent in these zones, (Reham, 1984, Isiugo-Abanihe *et al*, 1993). Early marriage in these zones arose from cultural influences that encourage daughter's marriage after her first menarche. The census data reported a substantial number of female marriages in the age-interval 10-14 in these northern zones. Female children are rarely given opportunity by their parents to have formal education before they are given in marriage, (Alabi, 1990). This makes school enrolment of young females very low in the northern part of Nigeria. Maternal mortality and the general physiological impairment that tend to accompany early marriage, and a high frequency of child bearing, characterised female marriages in these zones, (Ampofo *et al*, 1990, Kamara, 1991; Wall, 1998). Islamic religion favours polygamy, therefore many married women in these zones are involved in polygamy. The states in the Northcentral zone exhibit a slight diversity in religious and cultural practices as opposed to the other two northern zones with an indication of slightly lower rates of female child marriages. Marriages in this region are fairly more stable with an evidence of lesser marital instability as compared with the other two northern zones (Solivetti, 1994).

Single females in South-south zone enter into marital unions earlier than their counterparts in Southeast zone, but with slightly higher rate of marital instability. In the Southwest zone mainly populated by the Yorubas, marriage is relatively late due to the high level of education among single female populations, (Weiss *et al*, 1985). Polygamy is also practiced by the Yorubas, but not as pronounced as in the three northern zones. Later marriage is also common among the Southeastern females, which apart from high female education, may also be ascribable to the culture of high bridewealth that is normally demanded from prospective husbands by brides' family, (Isiugo-Abanihe, 1995). The predominant religion in Southeast and South-south is christianity, which frowns at the culture of polygamy, therefore polygamy is rare in these two southern zones. Marriages in Southeast are relatively most stable, with an evidence of lowest number of marital disruption from the census data.

In all the six zones, it is obvious from the census data that marriage is a universal phenomenon among female populations in Nigeria, with an evidence of very few or no female singles at advanced age.

4. NUPTIALITY TABLE

One of the most refined statistical tools used for the purpose of studying the nuptiality pattern is the nuptiality table, (Naushin *et al*, 1975). Nuptiality table generates the life history of a hypothetical cohort of single persons assumed to have been born at the same time, subjected to cause of decrement due to marriages and deaths occurring at different ages, (Jordan, 1952). When marriage is used as an attrition force of decrement on single population, the resulting table is referred to as *Gross nuptiality table*.

In this study, age-interval 10-14 is taken as the minimum age at marriage since the 1991 census reported substantial number of married females in the age group. Marriages over fifty-five are quite insignificant in Nigerian society. In the construction of nuptiality tables for this study, nuptiality span has therefore been taken as 10 to 54 years for single females. Explanation of the various columns of the constructed gross nuptiality tables are given in the footnotes.

4.1. Estimation of nupitality rates from the census data

In estimating nuptiality rates for Nigerian females, the proportions single are the basic data needed from the census data. The methodology developed by Mertens (1965), for the estimation of nuptiality rates has been followed in constructing the gross nuptiality tables. The independent rates of nuptiality indicating the probability of first marriage between ages x and x+n for single females are computed from equation (1).

$$ {}_5n_X = \frac{S'_X - S'_{X+5}}{S'_X} \qquad (1) $$

where

S'_X: Proportion single females at age x as given by census data.

S'_{X+5}: Proprotion single females at age x+n from census data.

${}_5n_X$: Five year nuptiality rate i.e. the probability that a female single at age x will marry during the next five years.

A prime is used to designate proportions and not to indicate derivative. Once the nuptiality rates have been obtained, the appropriate gross nuptiality tables are not difficult to construct.

4.2. Presentation and interpretations of the constructed gross nuptiality tables

The constructed gross nuptiality tables for female singles in Nigeria based on the 1991 census data are presented in tables 1 to 12.

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN SOUTH-EAST ZONE

Table 1 ANAMBRA

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.1460	100000	14600	463500	1074446	10.7445
15	0.4847	85400	41393	323517	610946	7.1539
20	0.4970	44007	21871	165355	287430	6.5315
25	0.6640	22135	14698	73932	122075	5.5149
30	0.6214	7437	4622	25633	48143	6.4730
35	0.4964	2816	1398	10585	22510	7.9939
40	0.3980	1418	564	5679	11925	8.4093
45	0.2226	854	190	3793	6246	7.3162
50	0.5219	664	346	2452	2452	3.6953
		317				

Table 2 IMO

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.1314	100000	13140	467150	1013252	10.1325
15	0.5592	86860	48572	312870	546102	6.2872
20	0.5449	38288	20863	139282	233233	6.0916
25	0.6955	17425	12119	56827	93951	5.3918
30	0.6118	5306	3246	18414	37124	6.9968
35	0.4160	2060	857	8157	18710	9.0838
40	0.4062	1203	489	4793	10554	8.7737
45	0.1115	714	80	3372	5761	8.0653
50	0.4945	635	314	2389	2389	3.7637
		321				

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN SOUTH-SOUTH ZONE

Table 3 AKWA-IBOM

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.3085	100000	30850	422875	821615	8.2162
15	0.6239	69150	43143	237893	398740	5.7663
20	0.5400	26007	14044	94927	160847	6.1847
25	0.6708	11963	8025	39754	65920	5.5102
30	0.6195	3938	2440	13592	26166	6.6439
35	0.4578	1499	686	5778	12574	8.3906
40	0.4233	813	344	3203	6796	8.3642
45	0.1849	469	87	2126	3593	7.6685
50	0.4636	382	177	1467	1467	3.8410
		205				

Table 4 EDO

X	${}_{n}n_{x}$	Sx	Hx	nLx	Tx	e_x^0
10	0.2940	100000	29400	426500	811421	8.1142
15	0.5757	70600	40644	251389	384921	5.4521
20	0.7223	29956	21637	95686	133532	4.4577
25	0.7745	8319	6443	25486	37846	4.5495
30	0.6337	1876	1189	6407	12360	6.5889
35	0.4801	687	330	2611	5952	8.6627
40	0.3476	357	124	1476	3341	9.3537
45	0.1421	233	33	1083	1866	8.0054
50	0.4331	200	87	783	783	3.9172
		113				

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN SOUTH-WEST ZONE

Table 5 OSUN

X	${}_{n}n_{x}$	Sx	Hx	nLx	Tx	e_x^0
10	0.2795	100000	27950	430125	831245	8.3125
15	0.5667	72050	40831	258173	401120	5.5672
20	0.6907	31219	21563	102188	142947	4.5788
25	0.7897	9656	7625	29217	40758	4.2210
30	0.7423	2031	1507	6385	11541	5.6835
35	0.3067	523	160	2215	5156	9.8535
40	0.4299	363	156	1424	2941	8.1065
45	0.3407	207	70	858	1517	7.3343
50	0.0670	136	9	659	659	4.8325
		127				

Table 6 ONDO

X	${}_{n}n_{x}$	Sx	Hx	nLx	Tx	e_x^0
10	0.2486	100000	24860	437850	944338	9.4434
15	0.4680	75140	35166	287786	506488	6.7406
20	0.5888	39974	23537	141030	218701	5.4710
25	0.7303	16438	12004	52177	77671	4.7253
30	0.7216	4433	3199	14168	25495	5.7508
35	0.3502	1234	432	5090	11326	9.1769
40	0.4932	802	396	3021	6236	7.7753
45	0.1848	406	75	1844	3215	7.9091
50	0.3459	331	115	1370	1370	4.1352
		217				

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN NORTH-CENTRAL ZONE

Table 7 BENUE

X	${}_{n}n_{x}$	Sx	Hx	nLx	Tx	e_x^0
10	0.5115	100000	51150	372125	608554	6.0855
15	0.7339	48850	35851	154622	236429	4.8399
20	0.6140	12999	7981	45041	81806	6.2933
25	0.6208	5018	3115	17301	36765	7.3272
30	0.4928	1903	938	7169	19464	10.2298
35	0.1168	965	113	4543	12295	12.7402
40	0.3350	852	286	3548	7751	9.0945
45	0.2309	567	131	2507	4204	7.4165
50	0.4430	436	193	1697	1697	3.8925
		243				

Table 8 NIGER

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.4795	100000	47950	380125	640270	6.4027
15	0.6950	52050	36175	169813	260145	4.9980
20	0.6439	15875	10222	53821	90332	5.6901
25	0.6559	5653	3708	18996	36511	6.4584
30	0.5477	1945	1065	7063	17515	9.0037
35	0.1782	880	157	4007	10452	11.8793
40	0.3974	723	287	2897	6445	8.9131
45	0.1392	436	61	2027	3548	8.1423
50	0.3781	375	142	1521	1521	4.0548
		233				

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN NORTH-WEST ZONE

Table 9 KANO

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.6784	100000	67840	330400	501491	5.0149
15	0.6999	32160	22509	104528	171091	5.3200
20	0.5877	9651	5672	34076	66563	6.8968
25	0.5934	3979	2361	13993	32487	8.1641
30	0.4660	1618	754	6205	18494	11.4304
35	0.2200	864	190	3845	12289	14.2236
40	0.1210	674	82	3166	8444	12.5302
45	0.0759	592	45	2849	5279	8.9109
50	0.2250	547	123	2429	2429	4.4375
		424				

Table 10 SOKOTO

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.7198	100000	71980	320050	479578	4.7958
15	0.7144	28020	20017	90056	159528	5.6934
20	0.5214	8003	4173	29581	69471	8.6812
25	0.4969	3830	1903	14392	39890	10.4152
30	0.3823	1927	737	7793	25498	13.2328
35	0.1736	1190	207	5435	17705	14.8755
40	0.0746	984	73	4735	12271	12.4752
45	0.1883	910	171	4123	7536	8.2793
50	0.1520	739	112	3413	3413	4.6200
		627				

GROSS NUPTIALITY TABLES FOR FEMALE SINGLES IN NORTH-EAST ZONE

Table 11 BAUCHI

X	${}_n n_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.6671	100000	66710	333225	507687	5.0769
15	0.6894	33290	22950	109075	174462	5.2407
20	0.6015	10340	6219	36151	65387	6.3238
25	0.5960	4120	2456	14463	29236	7.0954
30	0.5805	1665	966	5907	14774	8.8748
35	0.0041	698	3	3484	8866	12.6962
40	0.5128	695	357	2586	5382	7.7382
45	0.1447	339	49	1572	2796	8.2517
50	0.3101	290	90	1224	1224	4.2248
		200				

Table 12 YOBE

X	${}_n\mathrm{n}_x$	Sx	Hx	nLx	Tx	e_x^0
10	0.6967	100000	69670	325825	470357	4.7036
15	0.7636	30330	23160	93750	144532	4.7653
20	0.5982	7170	4289	25127	50782	7.0826
25	0.5216	2881	1503	10648	25655	8.9052
30	0.4756	1378	655	5252	15007	10.8888
35	0.1169	723	84	3402	9755	13.4970
40	0.2919	638	186	2726	6352	9.9527
45	0.1641	452	74	2074	3627	8.0249
50	0.3562	378	135	1552	1552	4.1095
		243				

where

X: Age in years

${}_n\mathrm{n}_x$: Five-year nuptiality rate

Sx: Number single at age X

Hx : Number of singles marrying at age X

nLx: Number of single females years lived as never married in the age interval (x, x+5)

Tx Total number of years lived as single after age x

e_x^0: Average number of years of single life remaining to a single female at age x

The following points are highlighted from a critical study of the nuptiality tables:

(i) The constructed gross nuptiality tables for single females show variation from zone to zone which could be a reflection of the social-cultural and heterogeneity of the population. In all the geo-political zones considered, the proportion of married females rises with age, peaking around age-interval 20-29, after which there is a gradual decline in the proportion married.

(ii) From the gross nuptiality tables, the three northern zones have relatively high nuptiality rates for single females at age-internal 10-14 years when compared with the three southern zones, but with a sharp decline after age 30. This is an indication that northern females tend to marry earlier than their counterparts in the southern regions. For single females in the Southeast, Southwest and South-south, the nuptiality rates are initially small, but increase gradually until they reached a maximum at age group 25-29, after which they gradually decline. The nuptiality rates at the age-group 10-14 years are relatively the lowest in Southeastern states, implying a low rate of girl-child marriage in the zone.

(iii) The average expected years of single life to first marriage for single females at different ages (e_x^0) as provided in the last column of the gross nuptiality tables revealed that the mean age at marriage was the highest in Southeast, followed by Southwest, South-south, Northcentral, Northeast and Northwest. The low mean age at marriage in the age-group 10-14 among single females in the northern zones could be ascribed to the tradition of early marriage in the zones, particularly in the Northwest zone which has the lowest mean age at marriage, an indication of the highest rate of girl-child marriage in the zone.

(iv) It could be inferred that the mean age at marriage for single females in the age- group 10-14, as shown in the constructed gross nuptiality tables, for Northeast, Northwest and Northcentral ranges from 14.7 to 16.4 years, and for Southeast, Southwest and South-south mean age at marriage ranges from 18 to 21.7 years. Previous investigation revealed that the mean age at first marriage for single females has increased slightly overtime. (Omu *et al*, 1986; Kuteyi, 1988; Isiugo-Abanihe *et al*, 1993). This development might be ascribed to the government policy on educating young females free for primary school education. School enrolment for young females has improved, and education being directly related to age at first marriage has increased with rapid socio-economic change, (Kuteyi, 1988).

5. DISSOLUTION OF MARITAL UNION AMONG MARRIED FEMALE NIGERIANS

Pattern of marital dissolution is one of the basic indicators of a population's social structure. In this segment of the study, the objective is to determine the probabilities of eventual exit from married status due to separation, divorce and widowhood, and to examine the regional differences in rates of marital dissolution of married females. Such differences not only have meaning in the study of fertility but also in the study of sociological and medical problems associated with marital disruption. The differences also have implications on the economic factors, which affect the supply of labour among married women, and the relation of dependency to marital adjustment of the persons or members of the family concerned. Examining the regional differences of the rate of marital dissolution will

invariably shed light on marital stability of married females across the six geo-political zones.

5.1. Description of the categories of female marital status

The data on female marital status, extracted from the 1991 population census data are, classified by age, state and marital status. The data are at age-interval of five years, with age-interval 10-14 as the minimum age-interval at which marriage could occur for the single females. All female respondents enumerated during the census fell into one of the five categories of marital status: (i) Never married (ii) Married (iii) Separated (iv) Divorced (v) Widowed.

In this section of the study, emphasis is laid on the married, separated, divorced and widowed category of women, in order to analyse the regional differences of marital stability among married females across the six geo-political zones in Nigeria. The descriptions of the categories of marital status of female respondents according to the National Population Commission are highlighted below:

> Married: Female respondents categorised as married are those who had a living spouse at the time of the enumeration, irrespective of whether the spouse was at home at the time of interview or away from home. This includes all heterosexual union, but excludes the practices of polyandry, animism and other traditional beliefs.
>
> Separated: Married women in this category are those that had been previously married, but the couple has been separated by judicial, religious or customary processes of law or by mutual agreement of the partners.
>
> Divorced: Divorced status unlike the separated implies the legal, customary, or religious termination of a marital union. Women whose marital unions have been terminated and who are legally free to re-marry but have not done so are described as divorced.
>
> Widowed: This category of female respondents is those whose husbands have died and have not subsequently remarried. (National Population Commission, p. 106-107).

5.2 Multiple decrement table

Multiple decrement table has found its application in various demographic fields, ranging from the study of pattern of termination of contraceptive to the study of contraceptive effectiveness, (Balakrishnan *et al*, 1970; Potter, 1963; Freedman *et al*, 1969). Application of multiple decrement techniques on married female cohort will shed light on the process of transformation from married status to the dissolution of marriage, and thereby gain insight into the regional variations in females' marital stability.

A multiple process is one in which individuals have more than one mode of exit. According to Jordan (1952), a multiple decrement table is a mathematical model which assumes a large body of lives subject to several independent causes of decrement which are operating continuously. The body of lives forms a closed group, there being no new entrants and no re-entrants after the operation of various decrements, (Alistair, 1979). The initials are married women who are exposed to the risks of separation, divorce and widowhood.

5.3. Functions of multiple decrement nuptiality table

Construction of multiple decrement nuptiality table is conceptually analogous to the construction of single life table. It is only necessary to add columns equivalent to other columns on the single decrement life table, which pertain exclusively to particular modes of exit from the table. The interpretation of columns in the constructed multiple decrement nuptiality tables are:

${}_nq_x^i$: the probability of leaving the married cohort due to cause '*i*' in the age interval (x, x + n), for a woman who reached age x.

${}_nd^i{}_x$: number of decrements from cause '*i*' in the age interval (x, x + n)

${}_nd_x^t$: the total number of decrements from all causes between ages x and x + n

l_x : number of married female cohort who reached age x. i.e number of persons who survived all causes of decrement from married status before age x.

${}_np_x^t$: total probability of remaining in the married cohort in the age interval (x, x + n).

Therefore

$$ {}_n d_x^t = \sum_{i=1}^{3} {}_n d_x^i \qquad (2) $$

$$ = {}_nd_x^1 + {}_nd_x^2 + {}_nd_x^3 \qquad (3) $$

where

i = 1 implies separation
i = 2 implies divorce
i = 3 implies widowhood

The model is based on the assumption that re-entrants, (re-marriages) is not allowed, therefore

$$ l_{x+n} = l_x - {}_n d^1{}_x - {}_n d_x^2 - {}_n d_x^3 \qquad (4) $$

So that

$$ l_{x+n} = l_n - {}_n d_x^t \qquad (5) $$

Number of persons reaching age x who will later succumb to cause 'i' is

$$ l_x^i = \sum_{i=1}^{3} {}_n d_x^i \qquad (6) $$

The probability of leaving married status due to cause *i* is in the age-interval (x, x+n) for a married woman who reached age x is

$$ {}_nq_x^i = \frac{{}_nd_x^i}{l_x}, \quad (7) $$

And therefore

$$ {}_nq_x^t = \frac{{}_nd_x^t}{l_x} = \sum_{i=1}^{3} {}_nq_x^i \quad (8) $$

The total probability of remaining in the married cohort in the age-interval
(x, x+n) is therefore

$$ {}_np_x^t = 1 - {}_nq_x^t \quad (9) $$

An important function on the multiple decrement table is l_x^i / l_x which is the probability of eventual exit from the table (from married status) due to cause '*i*' for persons age x

5.4 Presentation of the constructed multiple decrement nuptiality tables

The constructed multiple decrement nuptiality tables for married females for the twelve states selected across the six geo-political zones in Nigeria are presented in tables 13 to 24. The selected states are the same states used in the nuptiality tables with, the purpose of making comparison between the gross nuptiality tables and the multiple decrement tables in order to examine the implication of timing of marriage on the marital stability of the married females.

Once the age-specific probabilities of exit from married status for each of the three causes have been obtained, the appropriate tables are not difficult to construct. Interpretation of the various columns in the multiple decrement tables are also given in the footnotes after table 24.

MULTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN SOUTH-EAST ZONE

Table 13 ANAMBRA

X	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0128	0.0198	0.1765	100000	1285	1978	17652	20915	8011	7082	84795	0.0801	0.0708	0.848
15	0.0093	0.0081	0.0345	79085	734	641	2727	4102	6726	5104	67143	0.0851	0.0645	0.849
20	0.0093	0.0042	0.012	74983	698	317	903	1919	5992	4462	64417	0.0799	0.0595	0.8591
25	0.0092	0.0056	0.0149	73064	675	408	1087	2171	5294	4145	63514	0.0725	0.0567	0.8693
30	0.0133	0.0081	0.0345	70894	943	574	2443	3960	4619	3737	62426	0.0652	0.0527	0.8806
35	0.0145	0.0095	0.0658	66934	972	635	4403	6011	3676	3163	59983	0.0549	0.0472	0.8962
40	0.0147	0.0113	0.1322	60923	896	687	8053	9636	2704	2527	55580	0.0444	0.0415	0.9123
45	0.0149	0.0132	0.2031	51287	762	676	10419	11857	1808	1840	47528	0.0352	0.0359	0.9267
50	0.0131	0.0125	0.3032	39430	515	493	11956	12965	1046	1164	37109	0.0265	0.0295	0.9411
55	0.0116	0.0107	0.3922	26466	306	283	10380	10969	531	670	25153	0.0201	0.0253	0.9504
60	0.0082	0.013	0.4686	15497	127	201	7262	7591	225	387	14773	0.0145	0.025	0.9533
65	0.0093	0.0133	0.5578	7906	74	105	4410	4588	97	186	7510	0.0123	0.0235	0.95
70	0.0052	0.0169	0.626	3318	17	56	2077	2150	24	81	3101	0.0072	0.0245	0.9346
75	0.0035	0.0171	0.6614	1167	4	20	772	796	6	25	1024	0.0055	0.0215	0.8773
80	0.0063	0.0138	0.679	371	2	5	252	259	2	5	252	0.0063	0.0138	0.679
				112										

Table 14 IMO

X	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0087	0.0217	0.2441	100000	868	2169	24409	27445	4999	6165	88791	0.05	0.0616	0.8879
15	0.0132	0.0126	0.0675	72555	958	916	4895	6768	4132	3996	64382	0.0569	0.0551	0.8874
20	0.0077	0.0044	0.0167	65787	506	289	1099	1894	3174	3081	59487	0.0482	0.0468	0.9042
25	0.0082	0.0056	0.0205	63893	527	359	1309	2195	2668	2791	58388	0.0418	0.0437	0.9138
30	0.0082	0.0074	0.0466	61698	507	455	2876	3837	2141	2432	57079	0.0347	0.0394	0.9251
35	0.0082	0.0073	0.0865	57861	472	424	5005	5901	1634	1978	54204	0.0282	0.0342	0.9368
40	0.008	0.0083	0.1588	51959	414	433	8253	9100	1162	1554	49198	0.0224	0.0299	0.9469
45	0.0069	0.0085	0.2327	42859	296	365	9975	10636	748	1121	40945	0.0175	0.0262	0.9553
50	0.0063	0.0101	0.3447	32223	203	326	11109	11638	452	756	30970	0.014	0.0235	0.9611
55	0.0064	0.0103	0.4343	20586	131	211	8941	9283	249	430	19861	0.0121	0.0209	0.9648

60	0.0056	0.0105	0.5231	11302	63	118	5912	6093	118	219	10920	0.0104	0.0194	0.9662
65	0.0071	0.0127	0.604	5209	37	66	3146	3249	55	101	5008	0.0106	0.0193	0.9614
70	0.007	0.0127	0.6673	1960	14	25	1308	1347	18	35	1862	0.0092	0.0176	0.9501
75	0.0057	0.0122	0.7092	613	3	8	435	446	4	10	554	0.007	0.0157	0.9036
80	0.005	0.0127	0.7122	167	1	2	119	122	1	2	119	0.005	0.0127	0.7122
				45										

MULTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN SOUTH-SOUTH ZONE

Table 15 AKWA-IBOM

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0136	0.0161	0.102	100000	1360	1610	10200	13170	11040	10618	78339	0.1104	0.1062	0.7834
15	0.0136	0.0103	0.0204	86830	1181	894	1771	3847	9680	9008	68139	0.1115	0.1037	0.7847
20	0.0168	0.0112	0.0187	82983	1394	929	1552	3875	8499	8114	66367	0.1024	0.0978	0.7998
25	0.0202	0.0149	0.0372	79108	1598	1179	2943	5720	7105	7185	64815	0.0898	0.0908	0.8193
30	0.0234	0.0205	0.0864	73389	1717	1504	6341	9563	5507	6006	61873	0.075	0.0818	0.8431
35	0.023	0.0232	0.1516	63826	1468	1481	9676	12625	3790	4501	55532	0.0594	0.0705	0.8701
40	0.0211	0.0259	0.2699	51201	1080	1326	13819	16226	2322	3021	45856	0.0453	0.059	0.8956
45	0.0197	0.0264	0.3745	34976	689	923	13098	14711	1242	1695	32037	0.0355	0.0484	0.916
50	0.0162	0.0228	0.4861	20265	328	462	9851	10641	553	771	18938	0.0273	0.0381	0.9345
55	0.0168	0.0213	0.5752	9624	162	205	5536	5902	224	309	9088	0.0233	0.0321	0.9443
60	0.0122	0.0204	0.6471	3722	45	76	2408	2530	63	104	3552	0.0168	0.028	0.9544
65	0.0116	0.0178	0.7037	1192	14	21	839	874	17	28	1144	0.0145	0.0237	0.9595
70	0.0077	0.0173	0.7459	318	2	6	237	245	3	7	305	0.0107	0.022	0.9584
75	0.0111	0.0168	0.7516	73	1	1	55	57	1	1	68	0.0132	0.0203	0.9277
80	0.0094	0.016	0.7985	16	0	0	13	13	0	0	13	0.0094	0.016	0.7985
				3										

Table 16 EDO

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0089	0.0171	0.1053	100000	890	1710	10530	13130	18614	17949	63367	0.1861	0.1795	0.6337
15	0.0138	0.0104	0.0154	86870	1199	903	1338	3440	17724	16239	52837	0.204	0.1869	0.6082
20	0.0186	0.0118	0.005	83430	1552	984	417	2953	16525	15336	51499	0.1981	0.1838	0.6173
25	0.0211	0.0163	0.0083	80477	1698	1312	668	3678	14973	14351	51082	0.1861	0.1783	0.6347
30	0.0272	0.0218	0.0211	76799	2089	1674	1620	5384	13275	13040	50414	0.1729	0.1698	0.6564
35	0.0321	0.0279	0.04	71415	2292	1992	2857	7142	11186	11365	48794	0.1566	0.1591	0.6832
40	0.0396	0.0371	0.0822	64274	2545	2385	5283	10213	8894	9373	45937	0.1384	0.1458	0.7147
45	0.0415	0.0436	0.1411	54061	2244	2357	7628	12228	6348	6988	40654	0.1174	0.1293	0.752
50	0.043	0.0475	0.2399	41832	1799	1987	10036	13821	4105	4631	33026	0.0981	0.1107	0.7895

55	0.042	0.0477	0.324	28011	1176	1336	9075	11588	2306	2644	22990	0.0823	0.0944	0.8208
60	0.0413	0.0477	0.4135	16423	678	783	6791	8252	1130	1308	13915	0.0688	0.0797	0.8473
65	0.0387	0.044	0.5255	8170	316	359	4293	4969	451	525	7124	0.0552	0.0642	0.8719
70	0.0313	0.0384	0.606	3201	100	123	1940	2163	135	165	2831	0.0422	0.0516	0.8842
75	0.0272	0.0325	0.6698	1038	28	34	695	757	35	42	891	0.0336	0.0408	0.858
80	0.0238	0.0305	0.6957	281	7	9	195	211	7	9	195	0.0238	0.0305	0.6957

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MULTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN SOUTH-WEST ZONE

Table 17 — OSUN

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0086	0.0118	0.1669	100000	856	1177	16693	18727	16724	7109	75557	0.1672	0.0711	0.7556
15	0.0116	0.0061	0.0318	81273	939	498	2581	4019	15867	5932	58863	0.1952	0.073	0.7243
20	0.0148	0.0048	0.0036	77254	1144	373	279	1795	14928	5433	56282	0.1932	0.0703	0.7285
25	0.0165	0.0064	0.0042	75459	1245	485	316	2046	13785	5061	56003	0.1827	0.0671	0.7422
30	0.022	0.0079	0.011	73412	1615	580	810	3005	12539	4575	55687	0.1708	0.0623	0.7585
35	0.024	0.0092	0.0211	70408	1687	646	1483	3816	10925	3996	54876	0.1552	0.0567	0.7794
40	0.0303	0.0118	0.0507	66592	2018	785	3374	6177	9238	3350	53393	0.1387	0.0503	0.8018
45	0.0315	0.0122	0.0853	60414	1906	736	5151	7794	7220	2564	50019	0.1195	0.0424	0.8279
50	0.0352	0.0126	0.1623	52621	1854	662	8542	11059	5314	1828	44867	0.101	0.0347	0.8527
55	0.0339	0.0113	0.2323	41562	1411	472	9654	11537	3460	1165	36325	0.0832	0.028	0.874
60	0.0344	0.0117	0.3141	30025	1032	350	9430	10812	2049	694	26671	0.0682	0.0231	0.8883
65	0.0323	0.0099	0.4208	19213	621	191	8085	8896	1017	344	17241	0.0529	0.0179	0.8974
70	0.0268	0.0104	0.5314	10317	277	107	5482	5866	396	153	9157	0.0384	0.0149	0.8875
75	0.0184	0.0069	0.5874	4451	82	31	2614	2727	119	46	3674	0.0268	0.0103	0.8255
80	0.0217	0.0089	0.6148	1724	37	15	1060	1112	37	15	1060	0.0217	0.0089	0.6148

Table 18 — ONDO

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	${}_nl_x$	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0075	0.0215	0.1281	100000	750	2147	12807	15705	19924	12743	66742	0.1992	0.1274	0.6674
15	0.0138	0.0086	0.0265	84295	1167	728	2236	4131	19174	10595	53935	0.2275	0.1257	0.6398
20	0.0161	0.0072	0.005	80164	1288	578	397	2263	18007	9867	51699	0.2246	0.1231	0.6449
25	0.0202	0.0109	0.0052	77900	1577	845	404	2826	16718	9289	51301	0.2146	0.1192	0.6586
30	0.0259	0.015	0.01	75074	1947	1123	750	3820	15142	8443	50897	0.2017	0.1125	0.678
35	0.0295	0.0149	0.0182	71254	2104	1060	1294	4458	13194	7321	50147	0.1852	0.1027	0.7038
40	0.0364	0.0203	0.0428	66796	2430	1355	2858	6643	11090	6261	48853	0.166	0.0937	0.7314
45	0.0384	0.0214	0.0712	60153	2311	1285	4283	7878	8660	4906	45995	0.144	0.0816	0.7646

50	0.0467	0.0227	0.1413	52275	2440	1189	7386	11014	6349	3621	41712	0.1215	0.0693	0.7979
55	0.04	0.0237	0.2075	41260	1651	977	8563	11191	3910	2432	34327	0.0948	0.0589	0.832
60	0.0402	0.0238	0.2955	30070	1209	715	8886	10809	2259	1455	25764	0.0751	0.0484	0.8568
65	0.0331	0.0242	0.405	19260	637	466	7801	8904	1050	740	16878	0.0545	0.0384	0.8763
70	0.0281	0.0172	0.5057	10356	291	179	5237	5707	414	274	9077	0.0399	0.0265	0.8765
75	0.0207	0.0137	0.5976	4649	96	64	2778	2938	122	95	3840	0.0263	0.0205	0.8259
80	0.0153	0.0184	0.6205	1711	26	31	1061	1119	26	31	1061	0.0153	0.0184	0.6205

LTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN NORTH-CENTRAL ZONE

Table 19 BENUE

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0103	0.0154	0.0398	100000	1029	1541	3978	6548	19369	11707	68257	0.1937	0.1171	0.6826
15	0.02	0.007	0.0082	93452	1870	652	770	3292	18339	10166	64279	0.1962	0.1088	0.6878
20	0.0236	0.0074	0.0075	90160	2125	668	678	3471	16470	9514	63510	0.1827	0.1055	0.7044
25	0.0264	0.009	0.0146	86689	2290	784	1263	4337	14345	8846	62832	0.1655	0.102	0.7248
30	0.0276	0.0125	0.0317	82352	2271	1029	2614	5914	12054	8062	61569	0.1464	0.0979	0.7476
35	0.0286	0.0169	0.0613	76438	2184	1293	4689	8165	9783	7033	58955	0.128	0.092	0.7713
40	0.0292	0.0194	0.1077	68273	1993	1328	7352	10672	7599	5740	54266	0.1113	0.0841	0.7948
45	0.0328	0.0248	0.1712	57600	1890	1431	9859	13180	5606	4413	46914	0.0973	0.0766	0.8145
50	0.03	0.0235	0.2223	44420	1334	1045	9874	12253	3716	2982	37055	0.0836	0.0671	0.8342
55	0.0328	0.0263	0.2933	32167	1055	847	9436	11338	2382	1937	27181	0.0741	0.0602	0.845
60	0.0295	0.0243	0.3315	20829	615	505	6904	8025	1327	1090	17745	0.0637	0.0523	0.8519
65	0.0321	0.0247	0.4052	12805	411	316	5188	5916	712	585	10841	0.0556	0.0457	0.8466
70	0.0263	0.0221	0.4533	6889	181	152	3123	3456	300	269	5653	0.0436	0.039	0.8205
75	0.0251	0.0247	0.495	3433	86	85	1699	1870	119	117	2530	0.0347	0.034	0.737
80	0.0211	0.0203	0.5316	1563	33	32	831	895	33	32	831	0.0211	0.0203	0.5316

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Table 20 NIGER

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0073	0.0225	0.026	100000	731	2252	2596	5580	12342	14930	68327	0.1234	0.1493	0.6833
15	0.005	0.0096	0.0064	94420	467	907	601	1975	11611	12678	65731	0.123	0.1343	0.6962
20	0.0046	0.0077	0.0035	92445	424	716	323	1464	11143	11771	65130	0.1205	0.1273	0.7045
25	0.0043	0.0065	0.0036	90982	388	595	324	1307	10719	11054	64807	0.1178	0.1215	0.7123
30	0.0059	0.0086	0.0072	89675	530	768	646	1943	10331	10460	64484	0.1152	0.1166	0.7191
35	0.0064	0.0096	0.0122	87732	564	843	1073	2481	9801	9692	63838	0.1117	0.1105	0.7276
40	0.0108	0.0139	0.0315	85251	919	1186	2684	4789	9237	8849	62765	0.1084	0.1038	0.7362
45	0.0168	0.0183	0.0554	80462	1352	1476	4460	7288	8319	7662	60081	0.1034	0.0952	0.7467
50	0.0193	0.019	0.1072	73174	1413	1391	7843	10647	6967	6186	55620	0.0952	0.0845	0.7601
55	0.0242	0.0195	0.1522	62527	1516	1218	9514	12248	5554	4795	47777	0.0888	0.0767	0.7641

60	0.0257	0.0254	0.212	50279	1294	1276	10657	13227	4038	3578	38263	0.0803	0.0712	0.761
65	0.0285	0.0267	0.2673	37052	1057	988	9904	11948	2744	2302	27606	0.0741	0.0621	0.7451
70	0.0364	0.0282	0.3265	25104	915	707	8197	9819	1687	1314	17702	0.0672	0.0523	0.7051
75	0.0289	0.0258	0.3853	15285	442	394	5889	6726	773	607	9505	0.0505	0.0397	0.6218
80	0.0386	0.0248	0.4224	8559	330	212	3616	4158	330	212	3616	0.0386	0.0248	0.4224
				4401										

MULTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN NORTH-WEST ZONE

Table 21 SOKOTO

X	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0046	0.0162	0.0172	100000	463	1621	1721	3806	12237	17898	69040	0.1224	0.179	0.6904
15	0.0039	0.0093	0.0052	96194	379	895	505	1779	11774	16277	67318	0.1224	0.1692	0.6998
20	0.0032	0.0086	0.0043	94415	302	812	404	1517	11395	15382	66814	0.1207	0.1629	0.7077
25	0.0034	0.0086	0.0059	92899	316	795	553	1663	11093	14570	66410	0.1194	0.1568	0.7149
30	0.0054	0.0111	0.0134	91235	491	1016	1219	2726	10777	13775	65857	0.1181	0.151	0.7218
35	0.0082	0.0147	0.0255	88509	727	1301	2253	4281	10286	12759	64638	0.1162	0.1442	0.7303
40	0.0134	0.0207	0.0631	84229	1128	1743	5314	8185	9560	11458	62385	0.1135	0.136	0.7407
45	0.0203	0.031	0.1136	76044	1546	2357	8639	12542	8431	9715	57072	0.1109	0.1278	0.7505
50	0.0291	0.0345	0.1834	63502	1846	2194	11646	15686	6885	7358	48433	0.1084	0.1159	0.7627
55	0.0372	0.0402	0.2577	47816	1778	1920	12320	16018	5039	5164	36787	0.1054	0.108	0.7693
60	0.0456	0.0463	0.3327	31798	1450	1471	10579	13500	3261	3244	24467	0.1026	0.102	0.7695
65	0.0514	0.0513	0.3844	18297	941	939	7034	8914	1811	1773	13888	0.099	0.0969	0.759
70	0.0545	0.0553	0.4286	9383	512	519	4021	5052	870	835	6854	0.0927	0.0889	0.7304
75	0.057	0.0484	0.4462	4331	247	210	1933	2389	358	316	2832	0.0826	0.0729	0.6539
80	0.0571	0.0546	0.4633	1942	111	106	900	1116	111	106	900	0.0571	0.0546	0.4633
				825										

Table 22 KANO

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.029	0.0239	0.0347	100000	2902	2391	3473	8765	19197	21642	58933	0.192	0.2164	0.5893
15	0.0072	0.0125	0.0084	91235	652	1137	770	2559	16295	19251	55460	0.1786	0.211	0.6079
20	0.0065	0.0141	0.0086	88676	578	1248	761	2587	15643	18115	54690	0.1764	0.2043	0.6167
25	0.0061	0.0133	0.0086	86089	527	1146	741	2414	15064	16867	53929	0.175	0.1959	0.6264
30	0.0075	0.0136	0.0141	83674	631	1142	1183	2956	14538	15721	53188	0.1737	0.1879	0.6357
35	0.0097	0.016	0.0225	80718	787	1288	1820	3895	13906	14579	52006	0.1723	0.1806	0.6443
40	0.0172	0.0233	0.0537	76824	1322	1793	4126	7241	13119	13291	50186	0.1708	0.173	0.6533
45	0.0275	0.0326	0.096	69583	1912	2269	6680	10861	11797	11498	46060	0.1695	0.1652	0.6619
50	0.0454	0.0468	0.1729	58721	2664	2750	10150	15564	9886	9229	39379	0.1683	0.1572	0.6706
55	0.0638	0.0602	0.2484	43157	2753	2599	10720	16071	7222	6478	29229	0.1673	0.1501	0.6773
60	0.0839	0.0737	0.3337	27086	2273	1995	9038	13306	4469	3880	18509	0.165	0.1432	0.6833

65	0.0878	0.0772	0.3935	13779	1210	1063	5422	7695	2196	1884	9471	0.1594	0.1367	0.6874
70	0.1056	0.0913	0.4375	6084	643	556	2662	3860	986	821	4050	0.162	0.1349	0.6656
75	0.1136	0.0854	0.4627	2224	253	190	1029	1472	343	265	1388	0.1543	0.1193	0.624
80	0.1205	0.1001	0.4767	753	91	75	359	525	91	75	359	0.1205	0.1001	0.4767

MULTIPLE DECREMENT TABLES FOR MARRIED FEMALES IN NORTH-EAST ZONE

Table 23 BAUC HI

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0105	0.0184	0.0149	100000	1047	1839	1485	4371	13882	23484	61847	0.1388	0.2348	0.6185
15	0.0066	0.0137	0.0041	95629	630	1308	397	2334	12835	21645	60361	0.1342	0.2263	0.6312
20	0.0064	0.0151	0.0042	93294	597	1410	392	2399	12205	20337	59965	0.1308	0.218	0.6427
25	0.0064	0.0144	0.0052	90895	585	1312	474	2371	11608	18927	59572	0.1277	0.2082	0.6554
30	0.0074	0.0159	0.0096	88525	652	1405	853	2911	11023	17615	59098	0.1245	0.199	0.6676
35	0.0088	0.0185	0.0171	85614	753	1585	1460	3798	10371	16210	58245	0.1211	0.1893	0.6803
40	0.0124	0.0245	0.0425	81816	1016	2005	3477	6498	9618	14625	56785	0.1176	0.1788	0.6941
45	0.0182	0.0309	0.0751	75318	1371	2330	5658	9359	8602	12620	53308	0.1142	0.1676	0.7078
50	0.0272	0.0403	0.1429	65959	1791	2660	9423	13874	7231	10291	47649	0.1096	0.156	0.7224
55	0.0313	0.0508	0.1944	52085	1632	2645	10125	14401	5440	7631	38227	0.1044	0.1465	0.7339
60	0.0429	0.0573	0.2943	37684	1617	2161	11090	14867	3808	4986	28102	0.101	0.1323	0.7457
65	0.0481	0.0607	0.3488	22817	1097	1385	7959	10441	2191	2825	17012	0.096	0.1238	0.7456
70	0.0517	0.0729	0.4359	12376	640	902	5395	6937	1094	1441	9053	0.0884	0.1164	0.7315
75	0.0589	0.0666	0.4663	5439	320	362	2536	3219	454	539	3658	0.0834	0.0991	0.6726
80	0.0601	0.0798	0.5053	2220	133	177	1122	1432	133	177	1122	0.0601	0.0798	0.5053
				788										

Table 24 YOBE

x	${}_nq_x^1$	${}_nq_x^2$	${}_nq_x^3$	l_x	${}_nd_x^1$	${}_nd_x^2$	${}_nd_x^3$	${}_nd_x^t$	l_x^1	l_x^2	l_x^3	l_x^1/l_x	l_x^2/l_x	l_x^3/l_x
10	0.0175	0.0316	0.0287	100000	1753	3157	2870	7781	16822	27027	56026	0.1682	0.2703	0.5603
15	0.0099	0.0194	0.0056	92219	910	1786	521	3217	15069	23870	53156	0.1634	0.2588	0.5764
20	0.0086	0.0187	0.0047	89003	764	1665	415	2844	14158	22084	52635	0.1591	0.2481	0.5914
25	0.0081	0.0176	0.0065	86159	698	1520	564	2782	13394	20420	52220	0.1555	0.237	0.6061
30	0.01	0.0193	0.014	83377	832	1608	1165	3605	12696	18899	51656	0.1523	0.2267	0.6195
35	0.0125	0.0239	0.0221	79772	994	1905	1765	4664	11865	17291	50491	0.1487	0.2168	0.6329
40	0.0226	0.0365	0.0636	75108	1701	2740	4778	9219	10871	15386	48726	0.1447	0.2049	0.6488
45	0.0303	0.0466	0.1027	65889	1995	3070	6764	11829	9169	12646	43948	0.1392	0.1919	0.667
50	0.0459	0.0618	0.1973	54059	2479	3339	10668	16486	7174	9576	37184	0.1327	0.1771	0.6878
55	0.0528	0.0748	0.2635	37574	1983	2812	9901	14696	4695	6238	26516	0.1249	0.166	0.7057

60	0.0685	0.0864	0.3746	22877	1566	1976	8570	12112	2711	3425	16615	0.1185	0.1497	0.7263
65	0.0626	0.0824	0.445	10765	674	887	4790	6352	1145	1450	8046	0.1064	0.1346	0.7474
70	0.0743	0.0872	0.5112	4413	328	385	2256	2969	471	562	3255	0.1068	0.1274	0.7375
75	0.074	0.0968	0.5185	1445	107	140	749	996	143	178	999	0.0991	0.1229	0.6915
80	0.0808	0.0839	0.557	449	36	38	250	324	36	38	250	0.0808	0.0839	0.557
				125										

where

X :	Age in years
${}_nq^i{}_x$	Probability of exit from married status due to cause *i* in the age interval (x, x+5)
l_x	Number married at age x
${}_nd^i{}_x$	Number of decrements from cause *i* in the age interval (x, x+5)
$l^i{}_x$	Number of married women reaching age x who will eventually succumb to cause *i*
$l^i{}_x / l_x$	Probability of eventual exit due to cause 'i' for married females in the age-interval (x, x+5)

6. DISCUSSION

(i) A critical study of the multiple decrement nuptiality tables shows that the probabilities of eventual exit from married status due to separation and divorce designated as ${}^{1}l_x/l_x$ and ${}^{2}l_x/l_x$ respectively are initially high in all the states in the six zones, but tend to decline after age-interval 25-29. This is an indication that marriages become more stable around age-interval 25-29. Conversely, the probability of eventual exit from married status due to widowhood is initially small, but increases with age until around age 70 after which there is a decline in widowhood. This might be due to the fact that after age 70, greater percentage of married women must have died.

(ii) The rate of marital dissolution due to separation is lowest in Southeast. This might be attributable to the culture of high bride-price in the zone, which makes it difficult for husbands to separate from their wives, since the cost of marrying another wife is expensive.

(iii) The probability of exit from married status due to divorce is the highest in Northeast followed by Northwest, Northcentral, South-south, Southwest, and is the lowest in Southeast. This suggests that marriages are more stable in Southeast compared to other zones. The high rate of divorce in the three northern zones might be due to the culture of child marriage that is prevalent in the zones, since most adolescent married females could be physiologically and psychologically immature to manage marital challenges. Previous scientific investigations on this issue show that early marriage is associated with marital disruption, (Isiugo-Abanihe *et al*, 1993).

(iv) Generally, the probability of exit due to widowhood is the highest among the three causes of marital dissolution. Particularly, it is the highest in Southeast, and is the lowest in Northeast. It can therefore, be inferred that married females in Southeast have the highest tendency of early widowhood compared with other zones. This might be attributable to the wide age-gap that usually exists between married couples in Southeast.

(v) From the multiple decrement nuptiality tables, the summary of the probability of eventual exit from married status due to the three modes of decrement considered, and the nuptiality rates at age-interval 10-14 extracted from the constructed gross nuptiality tables are shown in table 25. Table 25 shows that zones with highest nuptiality rates at age-interval 10-14, particularly Northeast and Northwest have highest risk of marital dissolution through divorce, while the rate of marital dissolution due to separation is generally high in all the zones at age-interval 10- 14, except in Southeast zone which exhibit low rate of separation at that age-interval. Incidence of widowhood is the highest in Southeast and South-south, though having the lowest nuptiality rate at age-interval 10-14. The probabilities of eventual exit due to each of the three modes of decrement for the twelve selected states across the six zones are graphically portrayed in Figures 1 to 3, for an easy comparison at a glance.

Table 25: Probabilities of eventual exit and nuptiality rates at age-interval 10-14 for the selected states in the six geo-political zones.

Geo-political zones	Selected states	Separation l_x^1/l_x	Divorce l_x^2/l_x	Widowhood l_x^3/l_x	Nuptiality rate at age-interval 10-14 ($_5n_X$)
Northeast	Bauchi	0.1388	0.2348	0.6185	0.6671
	Yobe	0.1682	0.2703	0.5603	0.6967
Northwest	Sokoto	0.1224	0.1790	0.6904	0.7198
	Kano	0.1920	0.2164	0.5893	0.6784
Northcental	Benue	0.1937	0.1171	0.6826	0.5115
	Niger	0.1234	0.1493	0.6833	0.4795
Southeast	Anambra	0.0801	0.0708	0.8480	0.1460
	Imo	0.0500	0.0616	0.8879	0.1314
Southwest	Ondo	0.1992	0.1274	0.6674	0.2486
	Osun	0.1672	0.0711	0.7556	0.2795
South-south	Akwa-Ibom	0.1110	0.1067	0.7822	0.3085
	Edo	0.1861	0.1795	0.6337	0.2940

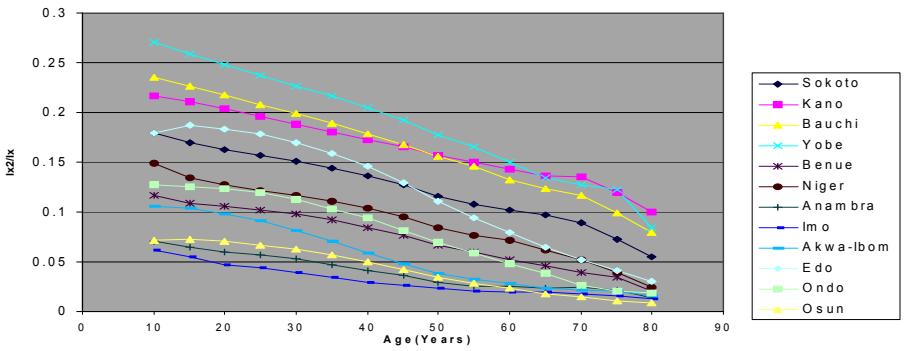

Figure 2: Distribution of probability of exit due to divorce by age, for married women in the six geo-political zones in Nigeria

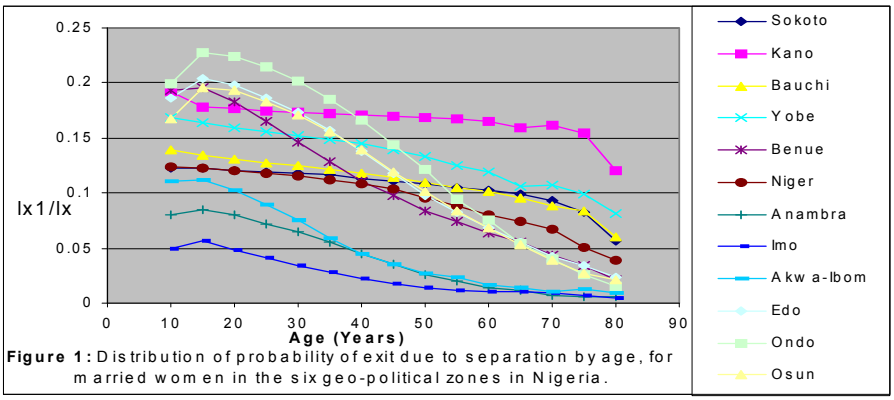

Figure 1: Distribution of probability of exit due to separation by age, for married women in the six geo-political zones in Nigeria.

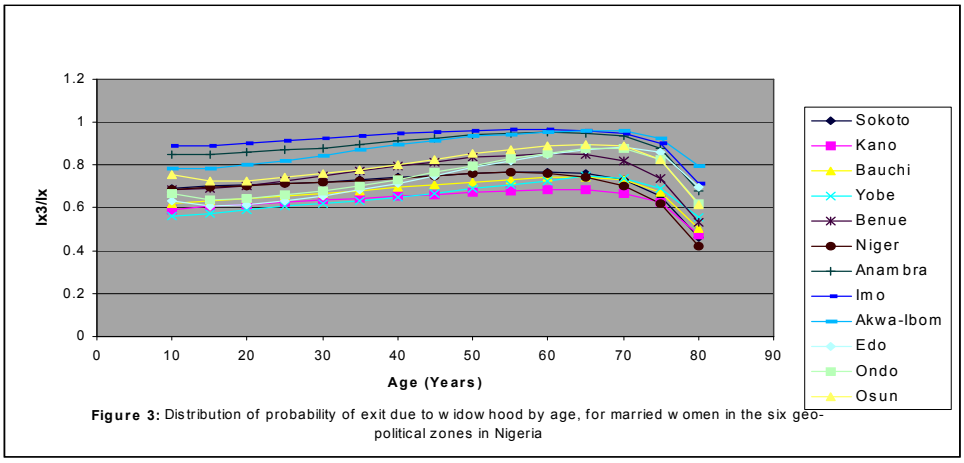

Figure 3: Distribution of probability of exit due to widow hood by age, for married women in the six geo-political zones in Nigeria

Figure 1 shows the graphical regional variation in the rate of marital termination due to separation, by age for married females in the selected states in the six geo-political zones. Rate of marital disruption due to separation is high at lower age-interval, but start to decline around age 25. It could be inferred from figure 2 that married females in Northeast have the highest rate of divorce, while figure 3 shows that married women in Southeast have the highest rate of widowhood.

7. CONCLUSIONS AND RECOMMENDATIONS

It is evident from the analysis that marriages become more stable as married females advance in age, with zones with high rate of girl-child marriage experiencing high rate of marital instability. Early marriage constitutes a limitation to the educational and employment opportunities of girl-child, and also exposes them to dangerous health risks. Since formal education influences age-at-first marriage and first child birth, a program to encourage young girls to continue formal and informal education is a necessary measure to ensure that young females are profitably occupied before reaching marriageable age. A direct government intervention of an effective legal and policy proposals to legislate a minimum marriage age, free education for females at both primary and secondary school level, therefore is necessary to discourage girl-child marriage. Hopefully, such policy will help in slowing down the high

rate of population growth, and in reducing the incidence of maternal morbidity and mortality that tends to accompany adolescent childbearing, and in discouraging girl-child marriage.

A relationship between broken homes and moral decadence among youths is a straightforward one. It is therefore, advisable that government should establish more effective marriage counseling units across the nation, with the aim of helping married couples manage their differences. This should help in reducing the high rate of marital dissolution, thereby reducing rate of juvenile delinquency in the society, and in the nation at large.

As much as child marriage has a negative impact on females marital stability, so also is later marriage or marriage delays in Southeast which is usually associated with fatal complications of pregnancy and childbirth that normally characterised advanced age pregnancy. The unfavourable culture of high bridewealth usually demanded from prospective husbands by the brides' family in Southeast should therefore be discouraged. This should encourage men to marry when attaining marriageable age, with an overall effect of removing the wide age-gap that usually exists between couple, which invariably will solve the problem of early widowhood among married females in Southeast.

From this study, it is noticeable that regions where girl-child marriage is prevalent have high rates of marital dissolution due to divorce, and later marriage has a high rate of marital termination through widowhood. To a great extent, adolescent marriage as well as marriage delay has negative implications on marital stability. Appropriate policy should therefore be enforced to discourage girl-child marriage and later marriage of females in order to ensure that Nigerian females marry at the right marriageable age.

Lack of explicit information on the type of marriage, whether polygamy or monogamy, and absence of information on marital mobility of female population, and number of times married, have constituted limitations to this study, which constrained further demographic analysis on the data. The analysts hereby recommend that subsequent population census should include information on types of marriage and marital mobility of married females in order to facilitate further research on marital mobility of married female Nigerians.

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